Alternative Application for Photo-Magnetic Propulsion – Camera Stabilization and Reactive Structural Reinforcement

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Introduction

The revolutionary propulsion type that may be termed Photo-Magnetic Propulsion (PoMP) or, alternatively, Soliton Impulse or Recoilless Magnetic Propulsion, regardless of what we may come to call it, remains poised to render obsolete nearly all antecedent propulsion mechanisms with which we are familiar.

As information concerning this propulsion system is available in this collection under the entry of 5 September 2022, I will not reiterate its inner workings, but will instead explore two heretofore unexplored potential alternative applications, of which there are likely to be many, for PoMP.

Abstract

Pseudo-Gyroscopic Stabilization

The process of capturing useful photographic telemetry often requires a stabilization mechanism to correct for or entirely prevent image blur. Blur may be caused by atmospheric distortion, platform instability or the motion of the object being photographed. While mechanisms already exist to correct algorithmically for atmospheric blurring and modest platform vibration, these mechanisms have distinct disadvantages which; if they could be overcome; would effectively improve the state of the art.

The ability to actuate a physical body without servomechanical action or motors opens up the possibility of exerting a stabilizing force in optical applications without the onerous weight, bulk and energetic requirements associated with gyroscopes.

By emplacing PoMP mechanisms on four sides of a camera housing, for instance, and projecting force from all four directions anti-centripetally (inwardly,) any physical shaking of the housing due to operator error or any other external influence would be dampened with equal effectiveness to heavy, energy-hungry gyroscopic mechanisms. Not only does this portend the possibility of the elimination of blurry images taken by handheld cameras, but it may enable the improvement of drone-derived images, as well.

When combined with artificial intelligence, as, after all, we are talking about a propulsion mechanism, it should even be possible for such a camera to be configured to levitate without any intervention, eliminating the need for any person to hold the camera, at all. In short, the camera, much like a vehicle propelled by PoMP, may levitate.

Reactive Structural Reinforcement

When coupled with pressure sensors and a modest microprocessor to manage the functions of the system, the walls and roof of residential or commercial structures may be protected by a Reactive Structural Reinforcement System (RSIS) build into the exterior-facing elements of those structures wherein PoMP serves as a mechanism for exerting a counter-force against high-winds or even extremely heavy debris such as trees or tree branches.
During extreme weather, the system may be activated in order to prevent the penetration of debris into the interior of the home by generating countervailing pressure from the opposite side of walls and roofing shingles.

Even something with as much kinetic energy a a brick carried by a tornado at hundreds of miles per hour could be powerfully deflected by such a system. The RSIS would sense the pressure from such a debris object within milliseconds and PoMP nodes would react at a force level equivalent to 105% of the energy of the impacting object. Modern roofing shingles already have the proper combination of toughness and elasticity to support this function, turning them into a sort of trampoline for debris.

If one considers the analogy of a thin-walled aluminium baseball bat making contact with a baseball, it becomes simple to understand that it is the elasticity of the bat which makes it possible to deflect the baseball with greater energy than that which it had while traveling toward home plate. The ability of PoMP to exert infinitely variable force with the ability to make ultra-rapid adjustments combine to allow it to not only prevent a falling tree, for example, from penetrating a structure but to propel that object powerfully in the opposite direction, creating a potential hazard for other homes not equipped with the system.

Conclusion

The aforementioned potential alternative applications recommend PoMP for development in these additional areas.